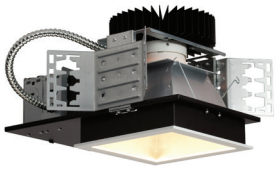
Lumination™ LED Luminaires

Downlights Powered by Infusion™
DI6S - 6" Square Aperture



Project name _____
Date _____
Type _____

Product Description:

Lumination DI Series LED downlights are powered by the Infusion™ downlight module for exceptional efficacy and color rendering. Designed for new construction applications, the DI6S is available in four color temperatures and five lumen packages, all with 90+ CRI. Matching custom engineered reflectors ensure a 45 degree cutoff. The twist-in Infusion DLM LED module allows for easy replacement and upgrade as LED technology advances, ensuring the lowest total cost of ownership. Output up to 3800 lumens is ideal for high ceiling applications.

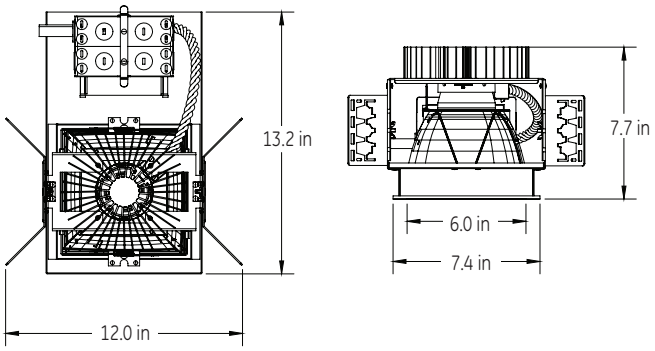
Targeted Performance Summary:

Distribution Patterns: Medium, Wide
Input Voltage: 120, 277V, 347V
Standard Dimming Controls: 0-10V or Phase Dimming to 10%
CCT: 2700K, 3000K, 3500K, 4000K
CRI: 90
Color Consistency: 4 Step MacAdam Ellipse
Lifetime Rating: 50,000 Hours
Input Frequency (Hz): 60Hz
Power Factor: >0.9
Mounting Options: Hanger bars for grid or drywall ceilings
Weight: 6.2 lb
IC Rating: Non-IC Rated
Limited Warranty: 5 years system
Files Available: LM79, LM80, IES, Revit

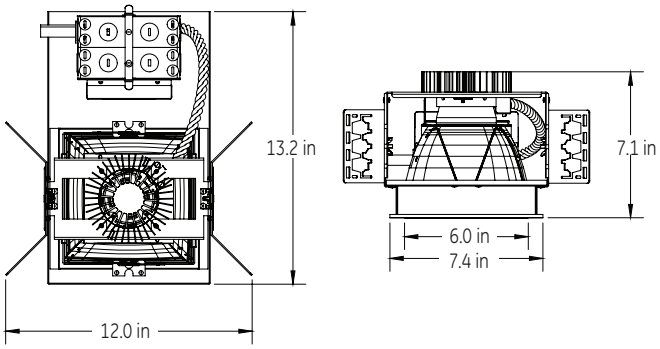
Nominal Module Lumens	1000	1500	2000	3000	4000
Delivered Lumen Output	970	1430	1930	2900	3800
System Input Power (W)	17	23	29	43	56
System Efficacy (LPW)	57	62	67	67	68
Emergency Mode Lumens	585	650	710	750	750

Product Dimensions:

DI6S (3000, 4000 lm)



DI6S (1000, 1500, 2000 lm)



Listings: c UL us LISTED

- UL and cUL Listed.
- Suitable for damp locations.

Awards: Next Generation 2014 INDOOR LUMINAIRES

a product of ecomagination℠

ENERGY STAR

Ordering Information:

When ordering you must specify equal quantities of luminaire and reflectors.

D I 6S _ _ _ _ _ _ _ _ _ _ R DI6S _ SD _ _

LUMINAIRE SKU						
INTERNAL CODE	FIXTURE TYPE	MODULE LUMEN OUTPUT	CRI/CCT	VOLTAGE	DRIVER	OPTIONS
DI	**6S** = 6 inch square downlight	**10** = 1000 LM **15** = 1500 LM **20** = 2000 LM **30** = 3000 LM **40** = 4000 LM	**927** = 90CRI, 2700K **930** = 90CRI, 3000K **935** = 90CRI, 3500K **940** = 90CRI, 4000K	**1V** = 120V **2V**[1] = 277V **3V** = 347V	**10** = 0-10V Dimming Driver **PH** = Phase Dimming	**(blank)** = None **EL**[1,2] = Bodine Emergency Backup with Remote Test Switch

REFLECTOR SKU				
REFLECTOR	HOUSING TYPE	BEAM SPREAD	REFLECTOR FINISH	FLANGE FINISH
R = Reflector	**DI6S** = 6" Square	**W** = Wide **M** = Medium	**SD** = Semi-diffused	**MR** = Match Reflector **WT** = White Paint

Ordering Notes:

1. 277V input, 1000 lumen version and all EL versions are not Energy Star certified.
2. EL option not available with 347V input voltage

ACCESSORIES	DESCRIPTION CODE	PRODUCT CODE
C-Channel Bar Hangers 25 1/4"	BH3	94890

imagination at work

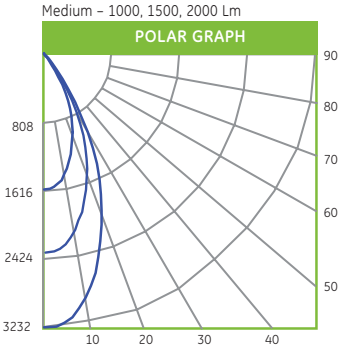
Photometric Data: Lumination™ DI6S Series Downlights

Medium Distribution

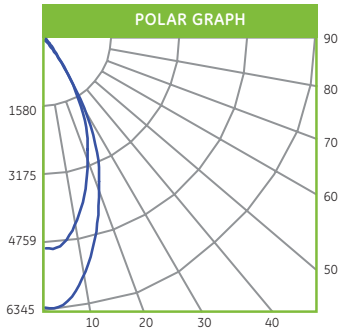
COEFFICIENTS OF UTILIZATION																		
RC	80%				70%				50%			30%			10%			0%
RW	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	114	111	109	107	111	109	107	105	105	103	102	101	100	99	98	97	96	94
2	109	104	101	97	107	103	99	96	99	97	94	96	94	92	94	92	90	89
3	104	98	93	90	102	97	92	89	94	91	88	92	89	86	89	87	85	84
4	99	92	87	83	98	91	87	83	89	85	82	87	84	81	85	82	80	79
5	95	87	82	78	93	86	81	78	85	80	77	83	79	76	81	78	76	74
6	91	83	77	73	89	82	77	73	80	76	72	79	75	72	78	74	71	70
7	87	78	73	69	85	78	72	69	76	72	68	75	71	68	74	70	68	66
8	83	74	69	65	82	74	69	65	73	68	65	72	68	64	71	67	64	63
9	80	71	65	62	78	70	65	62	69	65	61	68	64	61	68	64	61	60
10	76	67	62	59	75	67	62	58	66	62	58	65	61	58	65	61	58	57

NOTE: Floor Cavity Reflectance : 20%

Medium – 1000, 1500, 2000 Lm



Medium – 3000, 4000 Lm



CANDLEPOWER SUMMARY

NOMINAL MODULE LUMENS					
	1000	1500	2000	3000	4000
Angle	Candela	Candela	Candela	Candela	Candela
0	1613	2380	3225	4838	6331
5	1577	2328	3154	4732	6192
10	1415	2089	2830	4245	5555
15	1200	1772	2400	3601	4712
20	975	1439	1950	2924	3827
25	759	1120	1518	2277	2980
30	422	623	845	1267	1658
35	163	241	327	490	641
40	49	72	98	147	192
45	11	17	23	34	45
50	5	8	11	16	21
55	3	5	7	10	13
60	3	4	5	8	10

ZONAL LUMEN SUMMARY

NOMINAL MODULE LUMENS						
	1000	1500	2000	3000	4000	
Zone	Lumens	Lumens	Lumens	Lumens	Lumens	% of Fixture
0 - 30°	785	1159	1571	2357	3084	81.3
0 - 40°	936	1381	1872	2808	3674	96.8
0 - 60°	961	1418	1922	2883	3772	99.4
0 - 90°	967	1427	1934	2901	3796	100

CONE OF LIGHT

NOMINAL MODULE LUMENS						
	1000	1500	2000	3000	4000	
Height	fc	fc	fc	fc	fc	Dia. (ft.)
6'	45	66	90	134	176	5.2
8'	25	37	50	76	99	7.0
10'	16	24	32	48	63	8.7
12'	11	17	22	34	44	10.4
14'	8	12	16	25	32	12.2
16'	6	9	13	19	25	13.9
18'	5	7	10	15	20	15.7
20'	4	6	8	12	16	17.4

APPLICATION REFERENCE (Open Space)

NOMINAL MODULE LUMENS										
	1000		1500		2000		3000		4000	
Spacing	Avg. fc	W/ft²	Avg. fc	W/ft²	Avg. fc	W/ft²	Avg. fc	W/ft²	Avg. fc	W/ft²
4' x 4'	61.5	1.08	90.7	1.50	122.9	1.92	160.9	2.58	210.6	3.36
6' x 6'	28.7	0.50	42.3	0.70	57.4	0.90	75.1	1.20	98.3	1.57
8' x 8'	15.4	0.27	22.7	0.38	30.7	0.48	40.2	0.65	52.6	0.84
10' x 10'	10.2	0.18	15.1	0.25	20.5	0.32	26.8	0.43	35.1	0.56
	10' ceiling, Open Space: 50' x 40' x 10'						20' ceiling, Open Space: 50' x 40' x 20'			

LLF: 1.0 Initial, 80/50/20 Reflectances, 2.5' workplane

APPLICATION REFERENCE (Corridor)

NOMINAL MODULE LUMENS										
	1000		1500		2000		3000		4000	
Spacing	Avg. fc	W/ft²	Avg. fc	W/ft²	Avg. fc	W/ft²	Avg. fc	W/ft²	Avg. fc	W/ft²
4' on ctr.	28.7	0.75	42.4	1.04	57.4	1.33	59.2	1.79	77.5	2.33
6' on ctr.	19.5	0.51	28.8	0.71	39.1	0.91	40.3	1.22	52.7	1.59
8' on ctr.	13.8	0.36	20.3	0.50	27.6	0.64	28.4	0.86	37.2	1.12
10' on ctr.	11.5	0.30	17.0	0.42	23.0	0.53	23.7	0.72	31.0	0.93
	10' ceiling, Corridor: 6' W x 100' L						20' ceiling, Corridor: 6' W x 100' L			

LLF: 1.0 Initial, 80/50/20 Reflectances, Light levels on the ground

Spacing Criteria: DI6S - Medium = 0.74

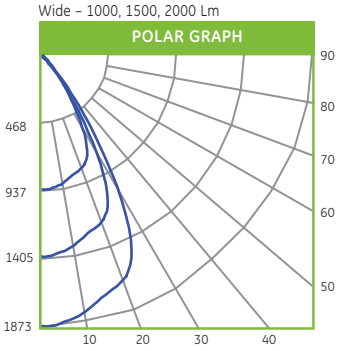
Photometric Data: Lumination™ DI6S Series Downlights

Wide Distribution

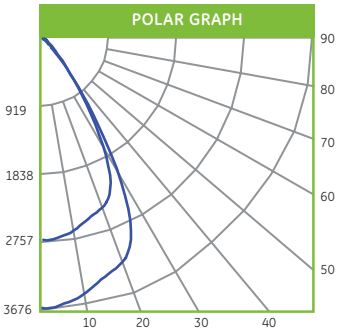
COEFFICIENTS OF UTILIZATION																		
RC	80%				70%				50%			30%			10%			0%
RW	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	113	110	108	106	111	108	106	104	104	102	101	101	99	98	97	96	95	93
2	108	103	98	95	105	101	97	94	98	95	92	95	92	90	92	90	88	86
3	102	95	90	86	100	94	89	86	91	87	84	89	86	83	87	84	82	80
4	97	89	83	79	95	88	83	78	86	81	78	84	80	77	82	78	76	74
5	92	83	77	73	90	82	77	72	80	75	72	79	74	71	77	73	70	69
6	87	78	72	67	85	77	71	67	75	70	67	74	69	66	73	69	66	64
7	82	73	67	62	81	72	66	62	71	66	62	70	65	62	69	64	61	60
8	78	68	62	58	77	68	62	58	67	62	58	66	61	58	65	60	57	56
9	74	64	58	54	73	64	58	54	63	58	54	62	57	54	61	57	54	52
10	71	61	55	51	70	60	55	51	60	54	51	59	54	51	58	54	50	49

NOTE: Floor Cavity Reflectance : 20%

Wide – 1000, 1500, 2000 Lm



Wide – 3000, 4000 Lm



CANDLEPOWER SUMMARY

NOMINAL MODULE LUMENS					
	1000	1500	2000	3000	4000
Angle	Candela	Candela	Candela	Candela	Candela
0	935	1380	1869	2804	3670
5	928	1370	1856	2784	3643
10	898	1325	1795	2693	3524
15	860	1269	1720	2579	3376
20	832	1228	1664	2496	3267
25	731	1079	1462	2193	2870
30	481	710	962	1443	1889
35	244	360	487	731	957
40	114	169	229	343	449
45	49	72	97	146	191
50	24	36	49	73	95
55	12	18	24	37	48
60	7	10	13	20	26

ZONAL LUMEN SUMMARY

NOMINAL MODULE LUMENS						
	1000	1500	2000	3000	4000	
Zone	Lumens	Lumens	Lumens	Lumens	Lumens	% of Fixture
0 - 30°	671	991	1343	2014	2636	69.5
0 - 40°	891	1315	1782	2673	3498	92.2
0 - 60°	959	1415	1918	2877	3765	99.2
0 - 90°	967	1427	1934	2901	3796	100

CONE OF LIGHT

NOMINAL MODULE LUMENS						
	1000	1500	2000	3000	4000	
Height	fc	fc	fc	fc	fc	Dia. (ft.)
6'	26	38	52	78	102	6.9
8'	15	22	29	44	57	9.2
10'	9	14	19	28	37	11.5
12'	6	10	13	19	25	13.9
14'	5	7	10	14	19	16.2
16'	4	5	7	11	14	18.5
18'	3	4	6	9	11	20.8
20'	2	3	5	7	9	23.1

APPLICATION REFERENCE (Open Space)

NOMINAL MODULE LUMENS										
	1000		1500		2000		3000		4000	
Spacing	Avg. fc	W/ft²	Avg. fc	W/ft²	Avg. fc	W/ft²	Avg. fc	W/ft²	Avg. fc	W/ft²
4' x 4'	60.4	1.08	89.1	1.50	120.8	1.92	154.4	2.58	202.0	3.36
6' x 6'	28.2	0.50	41.6	0.70	56.4	0.90	72.0	1.20	94.3	1.57
8' x 8'	15.1	0.27	22.3	0.38	30.2	0.48	38.6	0.65	50.5	0.84
10' x 10'	10.1	0.18	14.9	0.25	20.1	0.32	25.7	0.43	33.7	0.56
	10' ceiling, Open Space: 50' x 40' x 10'						20' ceiling, Open Space: 50' x 40' x 20'			

LLF: 1.0 Initial, 80/50/20 Reflectances, 2.5' workplane

APPLICATION REFERENCE (Corridor)

NOMINAL MODULE LUMENS										
	1000		1500		2000		3000		4000	
Spacing	Avg. fc	W/ft²	Avg. fc	W/ft²	Avg. fc	W/ft²	Avg. fc	W/ft²	Avg. fc	W/ft²
4' on ctr.	26.1	0.75	38.6	1.04	52.2	1.33	49.7	1.79	65.1	2.33
6' on ctr.	17.8	0.51	26.2	0.71	35.5	0.91	33.8	1.22	44.3	1.59
8' on ctr.	12.5	0.36	18.5	0.50	25.1	0.64	23.9	0.86	31.2	1.12
10' on ctr.	10.4	0.30	15.4	0.42	20.9	0.53	19.9	0.72	26.0	0.93
	10' ceiling, Corridor: 6' W x 100' L						20' ceiling, Corridor: 6' W x 100' L			

LLF: 1.0 Initial, 80/50/20 Reflectances, Light levels on the ground

Spacing Criteria: DI6S - Wide = 1.02

Product Specifications:

Construction:

- 16 gauge galvanized steel housing
- Custom engineered heat sinks for passive cooling at all lumen options
- Galvanized steel junction box with multiple knockouts

Installation:

- Universal mounting brackets with over 3" of vertical adjustment accommodate several types of hanger bars
- Accommodates ceilings up to 1.5" thick
- Mount in T-bar grid or drywall ceilings
- LED module twists in at time of trim installation, preventing damage to module during ceiling installation

Optical System:

- Custom engineered reflectors for precise beam distributions and 45° cutoff to light source and source image
- Standard semi-diffuse finish for ideal combination of optical efficiency and low glare

Electrical System:

- Infusion DLM LED module for exceptional performance and tool-free upgradeability
- Standard 0-10V dimming, high efficiency drivers
- Thermal protection feature in module protects LEDs from overheating in abnormal conditions

For more information and access to all of our resources, including our design tool visit: **www.gelighting.com**

www.gelighting.com

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IND086 (Rev 01/28/15)